

## ABSTRACT

Since the great number of elements constituting a unit pixel having an amplification function would hinder reduction of pixel size, unit pixel  $n,m$  arranged in a matrix form is comprised of a photodiode, a transfer switch for transferring charges stored in the photodiode, a floating diffusion for storing charges transferred by the transfer switch, a reset switch for resetting the floating diffusion, and an amplifying transistor for outputting a signal in accordance with the potential of the floating diffusion to a vertical signal line, and by affording vertical selection pulse  $\phi V_n$  to the drain of the reset switch to control a reset potential thereof, pixels are selected in units of rows.